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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,555	02/20/2004	James F. Stevenson	H0006422--1170	7448

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EXAMINER

LUKS, JEREMY AUSTIN

ART UNIT	PAPER NUMBER
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2837

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/783,555	STEVENSON ET AL.	
	Examiner	Art Unit	
	Jeremy Luks	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 6-7 and 10-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Rose (4,313,524) in view of Casser (5,945,643) and Siavoshai (2005/0126848). Rose teaches an integrated noise suppression acoustic panel (Figure 1), comprising: a substantially imperforate back plate (12); an at least partially perforated (20) face plate (18); and an open cell bulk foam absorber (17) disposed between the back plate (12) and the perforated face plate (18) (Col. 1, Line 66 - Col. 2, Line 11). Rose fails to teach the bulk foam absorber having a density gradient between the first side and second side wherein the density of the bulk foam absorber at the first side is greater than the density of the bulk foam absorber at the second side; the bulk foam absorber comprising an epoxy thermoset material, and wherein the foam bulk absorber further comprises a reinforcement material comprising a synthetic polymer or carbon fiber. Casser teaches a foam absorber (Figure 1, #20) comprising an epoxy thermoset material (Col. 5, Lines 62-64) and a reinforcement material comprising a synthetic polymer or carbon fiber (Col. 5, Lines 21-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of

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Rose, with the apparatus of Casser to provide a foam absorber that exhibits high rigidity and vibration dampening properties. Siavoshai teaches a bulk foam absorber (Figure 4, #12) having a density gradient between the first side (side near barrier #14) and second side (left side of #12) wherein the density of the bulk foam absorber at the first side (side near barrier #14) is greater than the density of the bulk foam absorber (12) at the second side (left side of #12) (Page 2, [0043]). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Rose as modified, with the apparatus of Siavoshai to increase the range of frequencies absorbed by the bulk foam absorber.

2. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rose (4,313,524) in view of Casser (5,945,643) and Siavoshai (2005/0126848) as applied to claim 1 above, and further in view of Haas (6,638,990). Rose, Casser and Siavoshai are relied upon for the reasons and disclosures set forth above. Rose, Casser and Siavoshai fail to teach wherein the bulk foam absorber further comprises a liquid blowing agent. Haas teaches a foam absorber comprising a liquid blowing agent (Col. 2, Lines 8-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Rose as modified, with the apparatus of Haas to give the foam desired physical and acoustic characteristics.

Response to Arguments

3. Applicant's arguments with respect to claims 1-3 and 6-12 have been considered but are moot in view of the new ground(s) of rejection. The Examiner considers the

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obvious combination of Rose, Casser, Siavoshai and Haas to teach all of the limitations as claimed by Applicant.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pertinent arts of record relating to noise suppression structures are disclosed in the PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy Luks whose telephone number is (571) 272-2707. The examiner can normally be reached on Monday-Thursday 8:30-6:00, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeremy Luks
Patent Examiner
Art Unit 2837
Class 181


LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER